

WHAT IS CLAIMED IS

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1. A header structure of a packet, which
is transferred to a mobile terminal through a packet
communication network that includes a plurality of
routers inclusive of communication routers
10 configured to communicate with mobile terminals
through radio, comprising information about
conditions of destination mobile terminals for which
said packet is destined, said information serving as
indication of destination.

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2. The header structure as claimed in
20 claim 1, wherein said information specifies
conditions of movement of the destination mobile
terminals.

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3. The header structure as claimed in
claim 2, wherein said information specifies speed of
the destination mobile terminals.

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4. The header structure as claimed in claim 3, wherein said speed is specified as a single speed.

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5. The header structure as claimed in claim 3, wherein said speed is specified as a plurality of speeds.

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6. The header structure as claimed in claim 3, wherein said speed is specified as a range of speed.

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7. A method of controlling packet transfer when packets are transferred to mobile terminals through a packet communication network that includes a plurality of routers inclusive of communication routers configured to communicate with mobile terminals through radio, comprising the steps of:

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making any given one of the communication routers keep track of information about conditions of mobile terminals that can communicate with and send said information to said any given one of the communication routers; and

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making each of the routers transfer a

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packet to other routers after checking destination
information when the packet, traveling through the
packet communication network, includes information
about the conditions of mobile terminals stored as
5 the destination information in a header portion
thereof;

making the communication routers transfer
the packet through radio to mobile stations that can
communicate with the communication routers if the
10 information about the conditions of mobile terminals
stored as the destination information in the header
portion of the packet matches the information about
the conditions of mobile terminals kept track of by
the communication routers.

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8. The method of controlling packet
20 transfer as claimed in claim 7, wherein the
information about the conditions of mobile terminals
kept track of by the communication routers and the
information about the conditions of mobile terminals
stored as the destination information in the header
25 portion of the packet are information about movement
of mobile terminals.

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9. The method of controlling packet
transfer as claimed in claim 8, wherein the
information about movement of mobile terminals

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specifies speed of mobile terminals.

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10. The header structure as claimed in claim 9, wherein said speed is specified as a single speed.

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11. The header structure as claimed in claim 9, wherein said speed is specified as a plurality of speeds.

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12. The header structure as claimed in claim 9, wherein said speed is specified as a range of speed.

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